

World Financial Markets

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The decade of Europe?, 1

Moving on from investment-led boom, 2

Inflation and the labor markets, 5

The EMS: converging on stability, 7

Can EMU fly?, 10

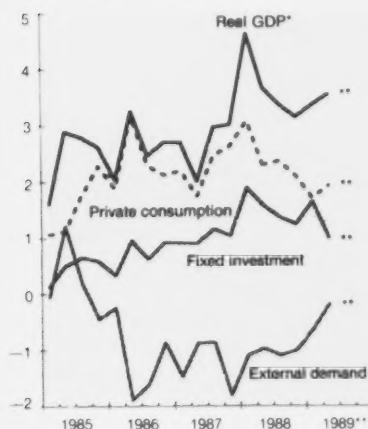
Eastern Europe: a cautionary note, 12

Statistical appendix, 16

Chart 1

Europe's growth machine

year-on-year real GDP growth in the EC,
percentage point contributions



*Year-on-year percent change

**Estimates for full year

The decade of Europe?

Western Europe enters the 1990s with a new-found confidence that would have seemed fanciful only a couple of years ago. Gone are the pessimism and talk of "Euro-sclerosis" bred by chronically rising joblessness. Instead, confidence has returned, employment expansion has resumed, and business investment has surged (see Chart 1). Some of the credit must go to the EC's 1992 "single market" project, which enlarges investment opportunities for productivity improvement, cost savings, and sales gains. At all events, Europe's real GNP grew 3.7% in 1988 and nearly as much in 1989. In 1990, the major economies on the Continent should again manage real GNP growth of 3% or more.

Most recently, the revolutions in Eastern Europe have added to the sense that the 1990s can be the decade of Europe. The East indeed holds trade and investment opportunities. But caution is in order here, for the difficulties of carrying through the necessary market-oriented reforms can hardly be overestimated. Even with well considered assistance from the West, success is not guaranteed, and will not come

to pass quickly. Still, the Eastern countries now have a chance for progress and their potential must be rated a net plus for growth in Western Europe too.

The Eastern developments have their most tangible Western impact on Germany, where 1.5 million immigrants have arrived since 1987, with many more still coming. They promise a major addition to an otherwise relatively stagnant 30-million labor force. Given time, this will enhance the economy's supply potential. On the demand side, the immigrants already added significantly to Germany's domestic growth in 1989; the impact could be as much as a full percentage point in 1990, which will serve to keep the German economy strong.

Too strong, perhaps. The immigration adds to inflation pressures on a German economy whose consumption already was set to accelerate in 1990 in response to the New Year tax cuts, job gains, and the prospective step-up in wage growth. The booming economy and rigid labor markets are reviving union clout. To quell the pressures, and also to counter the mark's weakness against the dollar up until late

1989, the Bundesbank tightened monetary policy repeatedly, prompting most EMS partners to follow suit. Further tightening cannot be ruled out, in both Germany and Europe at large, given the uncertainties and lags involved in bringing inflation to heel. Investment likely will slow in consequence yet, in the major Continental economies, continue vigorous by recent cyclical standards.

Despite the Bundesbank's tightening, there are omens favoring EMS stability. In contrast to 1989, Germany's towering trade surplus should stabilize or shrink in volume terms this year, and no longer aggravate the deficits run by most of its EMS partners, since Germany's domestic demand growth should no longer fall short of its neighbors'. Besides, France's December interest rate hike, plus Italy's January lira devaluation and adoption of the narrow band, have done much to quell fervor for an early full-scale EMS realignment. Official determination probably will stave off one for quite some time to come, leaving German desires for a stronger currency dependent on further appreciation against the dollar or, more awkwardly, the yen.

Yet EMS realignments may not be a thing of the past, say, in the event of policy errors, or as Continental Europe moves to a slower growth track, or again if dollar weakness persists. And sterling's probable accession to the EMS exchange rate mechanism later this year could provide a pretext to adjust parities for whatever reasons. The choices made are sure to color the preparations already under way for next December's EC intergovernmental conference. This is to map the remaining stages of the

Community's proposed monetary union. For a credible result, the conference will have to grapple convincingly and, no doubt, at length with touchy issues of national sovereignty, not to mention the complications newly raised by pressures for East/West German currency unification. Fair weather in the exchange markets will be a necessary, but by no means a sufficient, condition for a lasting and constructive European union.

Moving on from investment-led boom

Even before 1989's convulsions to the East, much of Western Europe was enjoying an economic boom. The business upswing, now over six years old, accelerated markedly in 1987. The acceleration has been remarkably general, albeit with some differences across Europe in strength, timing, and benefit to employment (see Table 1). Continental Europe currently shows most vigor: German real GNP rose 4% in 1989 and, in the first nine months of the year, both French and Italian output climbed about 3% from the year-earlier level. None of these major economies evinces any marked slowing; orders appear healthy, and both consumer and business confidence remain high. By contrast, the U.K. economy slowed rapidly in 1989 and, excluding oil production, may manage less than 1% growth in 1990. But this follows two years of fevered growth in 1987-88.

Business investment has spearheaded the EC economic boom. On average, nonresidential fixed investment in the four major economies rose about 10% annually in 1988-89 — well

Table 1

Real GNP

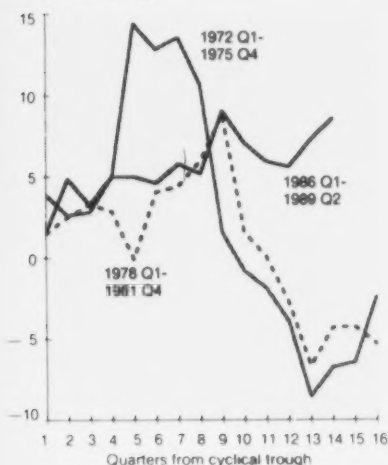
annual average percent change

	1979- 1987	1988	1989	1990
Europe	2.1	3.7	3.4	2.7
Germany	1.7	3.6	4.0	3.3
France	1.9	3.4	3.6	3.1
Italy	2.5	3.9	3.4	3.0
United Kingdom	2.2	4.3	2.4	1.1
Excluding oil		5.0	3.5	0.6
Denmark	2.2	-0.4	1.4	1.3
Spain	2.4	5.0	4.9	4.1
Japan	4.5	5.7	5.0	4.5
United States	2.7	4.4	2.9	1.5

Chart 2

Investment booms compared

EC fixed investment, year-on-year percent change



above the gains earlier in this recovery and not only higher but also longer lasting than those in any sustained period since the late 1960s (see Chart 2).^{*} This new-found resilience is partly the product of structural improvements.

First, the business community has gained confidence in the policy environment. Most European governments have a core of medium-term objectives that are understood by business, if not always popular. For much of Europe, the EMS confers policy stability. Most governments further have cut, or are in the process of cutting, business taxes, with major economies converging toward a tax rate of around 35% on distributed profits.

Second, the 1992 single-market project has spurred investment, from both inside and outside the Community. Some goes for rationalization and cost saving, the better to withstand competition as national barriers come down. Some firms invest to build sales and market share across the Community. In addition, not a few non-European firms deem investment warranted now to avert possible exclusion from the future single market. The projected accord with EFTA, and a conceivable extension one day to Eastern Europe in some form, compound investment interest.

Third, profitability improved secularly in most of Europe throughout the 1980s. All four major economies saw faster profit growth, higher real rates of return, and also a shift in income distribution toward profits. In most cases, this reversed the 1970s' profits plunge. Profits got

a notable boost from the 1986 slump in oil and other primary commodity prices. This "reverse" oil shock naturally went on to spark investment.

Nonetheless, the gains in both profits and investments have cyclical origins too: the sheer depth of the last recession, and the sluggish output recovery through the mid-1980s, left excess capacity in most industries far into the upswing; only in the last two years have capacity shortages seriously constrained output, in turn spurring investment in capacity additions (see Chart 3).

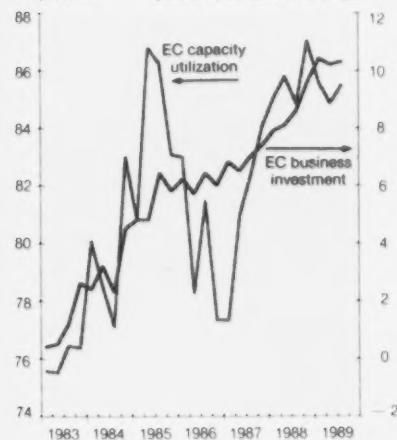
Cyclical forces now make investment less urgent for capacity expansion. Monetary tightening not only has raised the cost of borrowing but also, by strengthening most European currencies against the dollar and yen, has rendered manufacturing investment less attractive. Surveys suggest that business investment will slow somewhat this year in Germany, France, and Italy, and it promises to stagnate in Britain. Still, for Europe at large, the slowdown should be less pronounced than in the mid-1970s and early 1980s, not least because the structural positives are by no means exhausted and business finances generally are stronger than before.

With investment waning as the main prop for Europe's domestic demand growth, the key question is whether consumption will take up the running, based on gains in jobs and disposable income and on stable or falling household saving. In 1989 consumption grew 3.2% on average, but dropped nearly 2% in austerity-wracked Norway and soared 5.5% in self-confident Spain. The cast of consumption leaders and laggards has been shifting. Pre-

Chart 3

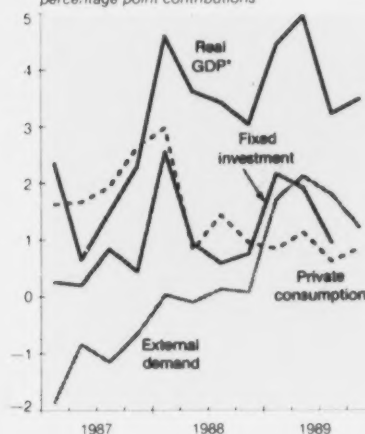
Investment and capacity

percent year-on-year percent change



^{*}In 1972-73, investment surged more strongly than in recent years, but soon succumbed to the first oil shock. In 1978-79, investment picked up less steadily than in the current cycle, and petered out earlier.

Chart 4

German growthyear-on-year real GDP growth,
percentage point contributions

*Year-on-year percent change

Table 2

**Germany's bilateral trade
balances**billions of dollars at annual rates,
not seasonally adjusted

	1988	1989 Jan-Nov
Total	72.9	71.9
Western Europe	66.6	71.5
France	10.4	13.0
Italy	6.5	8.0
United Kingdom	12.8	13.3
Belgium	6.2	5.8
Denmark	1.7	1.7
Netherlands	2.1	1.6
Spain	4.8	6.1
Eastern Europe*	-7.2	-7.9
Soviet Union	1.5	1.5
OPEC	2.6	2.0
Japan	9.5	4.3
United States	-8.7	-8.9

*Excluding East Germany.

viously, in 1988, consumption in Britain had surged 6.9%.* High real interest rates eventually put an end to this surge in early 1989. Real rates have risen elsewhere too. Consumption growth now may slow quite markedly in Spain, mildly in Italy, but largely hold its own in France on the basis of modest employment growth, limited personal tax reductions, and real income gains from falling inflation.

The main hope for sustained consumption growth in Europe as a whole lies in its prospective speedup in Germany. Consumption virtually stalled there in the first half of 1989 (see Chart 4), when spending by established residents was notably weak. But the new immigrants probably raised overall consumption by as much as 0.5% of GNP in the full year, even with their spending initially low. It can be expected to pick up as they gain jobs and credit; indeed, their peak impact likely will come in the first half of 1990 — just when tax cuts and higher wage growth boost spending otherwise. Altogether, Germany's consumption growth could reach or exceed 3.5% this year — more than double the meager 1.6% of 1989 — and boost its imports correspondingly.

If these expectations are met this year, not only will consumption largely substitute for investment as the mainstay of Europe's domestic demand growth but also its concentration in Germany will begin to correct trade imbal-

ances that, at present, lopsidedly favor Germany. Net export gains provided nearly half Germany's real GNP growth last year and raised its overall trade surplus both absolutely and relative to its gross trade and GNP. Germany's bilateral trade surpluses have risen most with countries, such as Britain and Spain, where cumulative domestic demand growth has been greatest in recent years (see Table 2 and Chart 5). These countries now are curbing domestic demand. And, with economic growth already sluggish in North America, and expected to slow elsewhere as monetary tightening takes hold, worldwide investment growth is projected to weaken. This will trim growth in Germany's capital goods exports.

Indeed, Europe faces declining real net exports more generally. This subtraction from output, which could be on the order of 0.2%, will continue the trend since the dollar peaked in 1985 (see Chart 6). Erosion of demand from North America — Europe's main trading partner — and of competitiveness vis-à-vis Japan will be compounded by the recent appreciation of most European currencies against the dollar and the yen, in the case of the mark by 15% since September. At least in the short run, any pickup in exports to the Eastern economies can hardly make up trade losses elsewhere in the world.

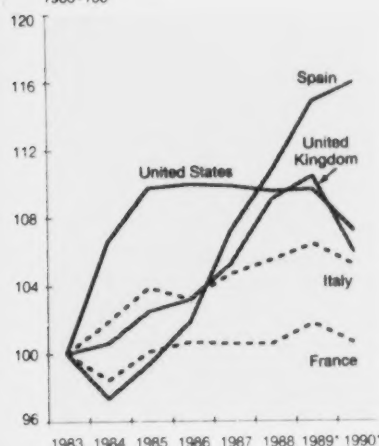
For Europe as a whole therefore, real GNP growth must be expected to slip a little this year — but from a gallop to a canter, not the crawl that was the best it managed in the 1980s until the last years of the decade. That crawl was the price paid for the adjustment policies followed by most European economies after

*U.K. personal saving plunged from 8% of disposable income in 1986 to a recent level below 4%; some of this decline may reverse in response to tighter money, but part stems from liberalized access to credit, especially based on housing collateral. Scandinavia exhibits something of the same phenomenon, which in future may appear elsewhere in Europe as credit becomes more accessible.

Chart 5

Domestic demand relative to Germany's

1983=100



*Estimated or projected

the second oil-price shock. Now comes the test of their efficacy in lifting Europe's longer-run potential growth.

Inflation and the labor markets

Judged by official and market comment, inflation expectations have risen in Europe over the past year. Most countries reported a distinct rise in inflation during 1989. Much of the rise came from tax or interest rate actions that should ultimately restrain inflation or reflected temporarily higher energy and food prices.* Indeed, core inflation has risen little in the major European economies (see Chart 7). Still, long-term bond yields have moved sharply higher recently, suggesting market worries that, even after the current growth surge crests, the level of aggregate demand will stay too high. This could allow further increases in profit margins and, with unemployment falling in most European countries (see Chart 8), ultimately undermine wage discipline.

So far wage increases have picked up rather little — even in

Britain, where inflation has surged and unemployment has fallen the most. Maybe the deep recession of the early 1980s, and the scale of the rise in unemployment through the decade, permanently reshaped European labor behavior: trade union influence declined in most countries as the more highly unionized industries suffered disproportionate job losses; and wage negotiations took on new realism, both unions and employers realizing that governments would no longer validate undue wage growth.

A more skeptical view would attribute wage sluggishness in Europe in part to settlement lags; annual or biannual contracts channel any unexpected spurt in income mainly to profits at first, and only later to wages. In addition, the notorious rigidities of European labor markets live on. These are manifest in persistently large disparities in regional unemployment. For example, whereas among the ten largest U.S. states the unemployment rate ranges from 2.8% to 7.2%, the range in Britain runs from about 3.5% in the Southeast to 9% or so in Scotland; in Germany it runs from about 4% in Bavaria to 12%-14% in some Northern city-states; and, in Italy, 6% unemployment in the North coexists with 21% in the South. Yet these disparities in Europe have little impact on wage behavior. In Germany, for example, wage increases in 1982-87 were in a narrow 3%-4% range; some areas with above-average joblessness even saw above-average wage gains.

Moreover, wage-setting practices in Europe remained largely intact during the 1980s. The shift of income to profits — central though this is to Europe's long-

Chart 6

EC trade balance

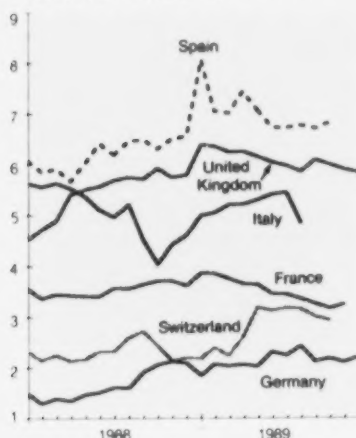
goods and services, billions of dollars



*Indirect tax changes added around ¾ of a percentage point to Germany's 1989 inflation. They added too to inflation in Italy, but subtracted in France, the Netherlands, and Britain. Measured U.K. inflation, however, was boosted some two percentage points by the relentless rise in mortgage interest rates.

Energy prices jumped in early 1989 thanks to strong worldwide demand and accidents to production and shipping. Food prices have accelerated sharply in Europe over the past year, due not only to adverse weather but also to beef and dairy production cuts undertaken to reduce Common Agricultural Policy costs and strengthen the overall EC budget. Future price increases in Europe for energy and food should be more moderate, given more normal weather, the expected recovery of production, the recent decline of the dollar, and its likely continued weakness. Still, the higher level of energy and food prices has cut into household purchasing power and leaves pressure for catch-up wage increases.

Chart 7

Core inflationconsumer prices excluding food and energy,
year-on-year percent change

term economic health — has not been accepted by unions as permanent. Rather they see it as reason for wages to "catch up." Especially in manufacturing, wages still are determined at the industry level, with an implicit target for real increases and recent and prospective inflation then determining nominal increases. The key settlements establish a "going rate" to which other established employees aspire, with scant regard for the interests of the unemployed. In Germany, the negotiations between the engineering employers' federation and the I. G. Metall union are the lead focus for wages in the 1990 pay round. In Britain and France, autoworkers set the pace.

The U.K. government stands out for its zeal over the past decade to free up labor markets, principally through reforms of trade union law. The reforms probably have contributed to the substantial step-up in U.K. productivity growth in manufacturing. But, in part because of the labor immobility due to housing-market rigidities and the neglect of competition as a privatization priority, Britain's reforms have yet to deliver wage discipline.

In Continental Europe, much less has been done to strengthen labor market competition. Even apart from agriculture, subsidies often remain a way of life in those economies, protecting those currently employed. And privatization rarely is espoused as a means to tackle recognized public-sector inefficiencies.

Yet there are grounds for optimism. France and Italy have partly liberalized labor dismissal procedures. And Germany is more permissive of temporary employment. These steps in principle should benefit hiring and

flexibility. More important, all across Europe the oncoming single market is increasing pressure for more flexible labor practices. Though the potential payoff is high, progress is slow in the teeth of interest group resistance. Muting that resistance may be the main economic value of the proposed EC Social Charter. This would permit Community directives and legislation on many aspects of working conditions, but without necessarily forcing minimum standards on member states. The Charter was endorsed at the Strasbourg Summit last December by all save Britain, which views it as interventionist and destructive of jobs. The Charter may indeed be at variance with free-market purism, but need not license market paralysis.

In addition, in the key case of Germany, there is the new factor of large-scale immigration. For the moment the influx is putting price pressure on housing and other nontraded goods and services, whose domestic supply cannot be supplemented by imports nor quickly expanded; in the case of housing, the pressure could intensify even as residential completions double between 1988 and 1990. But the newcomers' prospective labor-force participation is high since most are younger than established workers and many from East Germany are single. Moreover, the immigrants typically are more mobile and skilled than the existing unemployed. In due course, they will relieve regional and skill mismatches between labor supply and demand. And, across the board, they should bring greater competition to Germany's labor markets — both on and off the books. Their absorption even may prompt innovation in pay arrangements by means of bo-

Chart 8

Unemployment

percent of labor force

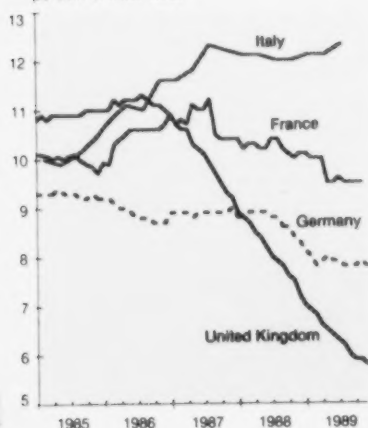


Table 3

Consumer prices

December-December percent change

	1988	1989	1990
<i>Europe</i>			
Germany	1.8	3.0	3.0
France	3.1	3.6	3.1
Italy	5.4	6.5	6.0
United Kingdom	6.8	7.7	5.5
Denmark	4.6	4.8	4.0
Spain	6.0	6.9	6.0
Japan	1.3	3.0	2.3
United States	4.4	4.6	4.8

nuses or two-tier schemes.

But all this will take time. Although East German immigrants enter the labor market relatively quickly and are snapped up by eager employers, Ethnic Germans from elsewhere in the East often spend about a year on language and training courses. In the short run, the rise in German inflation expectations, bred in part by the immigrant influx, seems to be stoking up organized labor's wage and working-hours demands. Employers may be eager to compromise for now, in the hope of averting strikes this spring when their sales are expected to be most vigorous. Still, they will be reluctant to commit themselves beyond one year, by which time labor force expansion may well relieve current shortages.

All told, Germany's inflation likely will rise only slightly further in 1990 — with the effects of fast domestic demand and wage growth outweighing a dip once the 1989 tax hikes drop out of the twelve-month inflation measure — before receding as labor markets ease. Significantly, France's inflation could work into line with the German rate (see Table 3), completing a decade-long process of convergence. Inflation containment looks more problematic in Italy, Switzerland, and much of Scandinavia. But the trend should be downward in economies whose activity is slowing, particularly in Britain where declines in core inflation and mortgage rates could bring down "headline" inflation to about 5.5% by year-end.

participating in the exchange rate mechanism (ERM) have not been realigned since January 1987, aside from the recent adjustment bringing the lira into the narrow 2.25% band.* Governmental resolve and near-term economic prospects now give a good chance that 1990 will see no realignment of the core French, Belgian, and Dutch currency parities with the mark. There is a good chance too that sterling will enter the ERM. This could occasion minor adjustments of several currencies, as could the progressive ending of exchange controls. Nor does the core group's present stability preclude realignment later. Most likely, this would be more limited in scope and scale than in the early years of the EMS. Thus the EMS currencies show a process of convergence on stability, but have yet to reach that promised land.

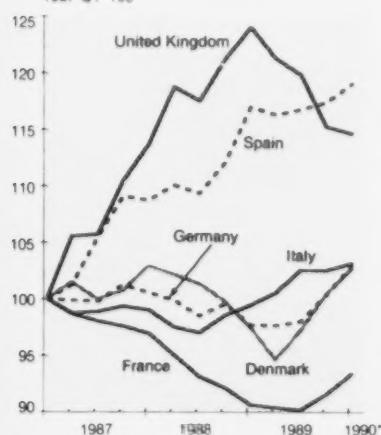
Crucial to the prevailing EMS stability are France's gains on balance in price and cost competitiveness (see Chart 9). The credit goes mainly to wage containment, which was dramatically reaffirmed in last October's pacesetter Peugeot settlement. Moreover, France's manufactures exports have lost only a little ground in foreign markets in the last year or two and its current account deficit has widened little. Besides, because the fundamentals bode fairly well for German trade adjustment this year, important relief is in sight for the trade positions of France and other European countries managing their domestic demand

Chart 9

Currency competitiveness

unit labor costs in manufacturing relative to trade partners

1987 Q1=100



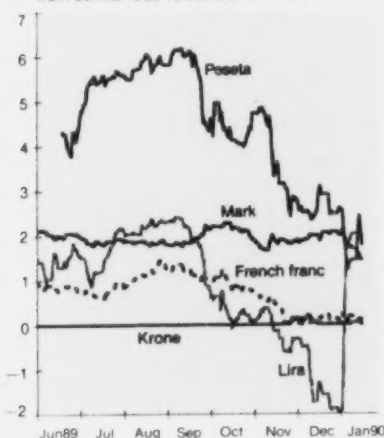
*Latest plots, for 1989 Q4 and 1990 (first two weeks), apply changes in the J.P. Morgan real effective exchange rates to the IMF's estimates of 1989 Q3 relative unit labor costs.

The EMS: converging on stability

The parities of EMS currencies

*The adjustment left the lira's lower fluctuation limits unchanged, but lowered the ceilings. The authorities earlier allowed the lira to drift down toward the lower limit, thereby exploiting the wide 6% band to the full, before locking in to the new narrow band.

Chart 10

EMS tensionpercent change in market spot rates
from central rates versus Danish krone*

*The krone is used as the reference currency because during the period it has usually been the weakest currency in the ERM.

growth with prudence.

The EMS has evolved since the days when trade and competitiveness imbalances forced realignments because private capital was less mobile than today. The gains against inflation made by France, Denmark, and Ireland — and not made by Britain — show how governments can exploit the EMS as an effective surrogate incomes policy; it offers counterinflationary credibility, as well as deflationary threat, that purely domestic commitments lack. These countries' investment in credibility, purchased dearly over a sustained period, could be lost immediately were they to devalue; hence, their willingness to raise short-term interest rates when their currencies come under pressure within the ERM narrow band (see Chart 10). In particular, France opted in December for a 50-basis-point unilateral rise in official rates; and its economy probably could cope with yet another rise if need be. Indeed, since all the main Continental economies are likely to expand briskly for some time to come, they seem unlikely to devalue but rather will keep their interest rates in step as necessary with Germany's, if at some cost to economic growth.

Yet Germany's self-interest may be at odds with EMS stability. For much of 1989, the mark sagged and stayed weak against the dollar in the face of rising German interest rates. Frustrated on this score, yet eager for a stronger mark, Bundesbank officials openly made known their desire for mark revaluation against the other EMS currencies. The case for a stronger mark looked compelling: by encouraging imports to ease domestic bottlenecks, discouraging foreign demands for German ex-

ports that are taxing domestic production capacity, and deterring excessive investment for tradable goods production that may find no market once intra-European adjustment occurs, it would work to trim the German trade surplus; more important, it would help rein back domestic inflation, restoring Bundesbank credit among critics who judge it too willing to sacrifice discipline at home for European objectives.

Even so, Germany cannot engineer EMS realignment without its partners' consent. Instead, the most conspicuous result of Bundesbank tightening so far has been a near-15% climb in the mark/dollar rate since mid-September, helped by Federal Reserve easing, the consequent crossover of short-term German and U.S. interest rates, and the "Europhoria" now sweeping many global investors. The mark/yen rate likewise has climbed dramatically. In addition, within Europe, but outside the ERM, the U.K. authorities have accepted a 10% drop in the sterling/mark rate since October rather than hike interest rates yet again.

The upshot has been that by mid-January 1990 the mark had risen 5% from its low of last September in broad real effective terms against the major currencies worldwide, and was back close to its level at the time of the Louvre Accord nearly three years ago. Thus, the German authorities have achieved a stronger currency. But it has taken a policy mix of higher interest rates and a lower mark exchange rate in the ERM than they prefer even now in light of Germany's huge trade surpluses within Europe, the competitive disadvantage German producers now face vis-à-vis U.S. and Japa-

Table 4

Current account balances
billions of dollars

	1988	1989	1990
<i>Europe</i>			
Germany	49	53	50
France	-4	-4	-5
Italy	-5	-7	-11
United Kingdom	-26	-33	-28
Denmark	-2	-2	-2
Spain	-4	-10	-15
Japan	80	57	60
United States	-127	-112	-105

nese rivals, and the disruption of the world's key currency relationships.

Continued EMS stability relies on several assumptions: for example, that the removal of exchange controls turns out a non-event; that German interest rates have little further to rise to tame inflation pressures; that progress is made, or thought imminent, in intra-European trade adjustment; and that domestic demand in the ERM economies holds up well enough that the output and employment costs of external imbalances remain politically supportable for the sake of price and wage discipline.

Any of these assumptions could be belied by events. The greatest risk may be that wage push and general overheating, perhaps aggravated by "opportunities" in Eastern Europe, could dictate substantially higher German interest rates. Inadequate trade and current account adjustment also could prove a problem (see Table 4). Granted, up to a point, the widening of trade imbalances may be judged analytically to have been a harmless, and even virtuous, by-product of Europe's economic integration. This process is opening cross-border investment opportunities and is boosting gross trade flows, particularly in automobile components and other semimanufactures, as production stages disperse across countries. Nonetheless, the imbalances also reflect divergent demand policies and performance.

Moreover, several of Germany's EMS partners have lost price and cost competitiveness in recent years. The position may be evaluated in a number of ways, for example, by relative wholesale prices of manufactures, as gauged by the J.P. Morgan real

effective exchange rate indices, or by relative unit labor costs in manufacturing, as estimated by the IMF. Since the January 1987 EMS realignment, the big loser on both bases has been Spain, due to inflation and peseta strength. Britain lost heavily through early 1989, but has made up much ground by sterling's decline against the EMS currencies. Italy and Denmark have held broadly steady in labor cost terms for the period as a whole, but each has been hit by the dollar's recent fall.

The combination of trade imbalances and competitiveness trends turns up several candidates for eventual devaluation: the peseta, despite Spain's still recent linking to the EMS; the lira, given Italy's inflation problem; the krone, recalling Denmark's major loss of competitiveness over the 1982-86 period; and, were Britain an ERM participant, sterling, to make up for the United Kingdom's demand excesses in 1987-88 and continuing high wage inflation.

The slowing of U.K. domestic demand in 1989 already has convinced the British to let sterling depreciate. And, were the Danish government more confident of sustaining wage discipline, a downward move for the krone would make sense, given that Denmark has had no net economic growth since 1986 and now faces short-term interest rates of 14% and more, a full ten points above inflation. Devaluation, however, makes little sense for economies facing high demand pressure, as do Spain and Italy at present. Nonetheless, their calculations could change once fast domestic demand growth gives way to more moderate expansion. Indeed, if Europe's growth slows more se-

verely than expected — undercut by a weak dollar or, even more, in the event of U.S. recession — commitments to existing EMS parities are sure to be rethought.

Can EMU fly?

The risks just outlined may come to haunt an otherwise fairly benign environment for this July's launching of the three-stage progression toward European monetary union (EMU) envisaged in the April 1989 Delors Report. The first stage commits EC members to closer policy coordination and performance convergence; to the phasing-out of exchange controls still operated by Spain and some of the smaller states; and to the participation of all members — most significantly, Britain — in the EMS exchange rate mechanism, albeit with no target date agreed. All this ventures little beyond present practice and professed intent.

The same cannot be said of the later stages of EMU, which cannot help but encroach on national prerogatives in monetary policy. At the Strasbourg Summit the EC leaders agreed to convene an intergovernmental conference next December to lay plans for those later stages. If no general EMS realignment occurs this year — effectively for the fourth year in a row — and exchange market conditions also appear benign at the time, some conference participants could argue that the time was at hand, or at least was fast approaching, to eliminate existing fluctuation bands and declare an "irrevocable" fixing of exchange rates among the national currencies.*

Yet such a fair-weather EMU likely would not long endure, even if prefaced by one more,

and supposedly final, parity realignment. A workable EMU must resolve major issues of institutional structure and control — issues inescapably dominated by political and national sovereignty concerns as well as economic objectives. In the Delors Report view, the monetary union would be managed by a European central banking system, perhaps structured somewhat on the U.S. Federal Reserve model; and the monetary structure would be complemented by binding rules on national fiscal policies to assure an appropriate overall fiscal stance for the Community.

The Delors Committee view is not universally shared. Certainly, the necessity for centrally prescribed fiscal rules appears questionable, inasmuch as market discipline over member states seems potent in other monetary unions such as Australia, Canada, and the United States; of course, in these cases the federal government's economic weight is much larger

*If truly irrevocable, this would accomplish a kind of EMU, but with most of the costs and few of the benefits of a full-scale currency union. To make the fixed rates credible, national monetary policies would have to be so strictly coordinated as to lose all serious vestige of independence. Yet currency conversion costs would not disappear, even though no longer containing an exchange risk premium. Unless interchangeable at one-to-one parities, the various national currencies would find only limited day-to-day use as media of exchange outside their countries of issue. And, even at par, the Luxembourg franc does not circulate freely throughout Belgium. Nor do Scottish clearing banks' notes in England, unlike bills issued by the twelve Federal Reserve banks within the United States. Of course, conversion costs would vanish were one currency to emerge preeminent across Europe, as the dollar may come to do in Latin America. The mark would be a candidate for preeminence in Europe on store-of-value grounds. Instead, political considerations leave only one viable choice, albeit a risky and visionary one: a European common currency, possibly owing parentage to the ECU, with a single bank of issue that effectively supersedes national central banks.

relative to that of the states than in the EC.

More crucial for the EC than the fiscal issue is the mandate of the proposed central bank. The Bundesbank is adamant that its own priority for price stability and substantial independence of political control be replicated in the Community institution. EC governments subscribe to price stability rhetorically, but often backslide in practice unless external pressures compel discipline. To surrender control of monetary policy to appointed central bankers goes against the grain of politicians; besides, it raises questions of democratic accountability. The central bankers are pressing their aims through their European committee, which recently elected the Bundesbank president as its leader — for the first time to a three-year term. For their part, governments prefer that the issues be tackled in the European Monetary Committee, in which Treasury voices carry weight.

Further complicating matters, Britain has advanced a vision of limited union emphasizing competition among national monetary policies within a fully fixed-rate EMS carrying minimal institutional superstructure. This approach reflects U.K. distaste for loss of sovereignty, especially to "bureaucrats in Brussels" — no mat-

ter the checkered history of its own monetary management and the probability that its approach would entrench the supremacy of the Bundesbank across Europe. Though the U.K. approach falls far short of the Delors Report vision, and is widely seen as a recipe for delay, it has the merit of simplicity and acknowledges that market forces are a power to be reckoned with. But to carry weight at the forthcoming conference, Britain first will have to sign into the ERM. The gravity of the issue means that Britain likely will do so in the second half of this year, assuming U.K. inflation declines as expected.

Clearly, even with all parties constructively engaged, the intergovernmental conference may prove a lengthy affair. Thus the completion of EMU may lie many years in the future. Enthusiasts naturally wish a quick decision. Many will argue that developments to the East heighten the urgency of EC union — in both its single market and monetary dimensions. Perhaps so. But if EMU is to endure, it cannot rely on good luck or goodwill to paper over differences; it also must provide mechanisms to reconcile interests and distribute benefits such that all national governments find their sacrifice of monetary independence worthwhile.

Table 5
Income and population, 1988

	Nominal GNP* dollars billion	Popula- tion millions	GNP per capita,* dollars
Bulgaria	50	9	5,600
Czechoslovakia	110	15	7,600
East Germany	150	16	9,400
Hungary	70	11	6,500
Poland	210	38	5,500
Romania	95	23	4,100
Greece	70	10	6,800
Portugal	65	10	6,400
Spain	370	39	9,400
Italy	750	57	13,000
West Germany	870	61	14,200
United States	4800	246	19,600

*The GNP figures, necessarily crude, are expressed in dollars at estimated "purchasing power parities." Referenced to U.S. goods and services prices, these attempt to avoid the distortion of real income comparisons inherent in conventional market exchange rate conversions.

Table 6
Eastern Europe's external
trade, 1989
billions of dollars

	Exports	Imports
Hard-currency total	41.7	36.3
Bulgaria	2.5	2.9
Czechoslovakia	5.4	5.7
East Germany	9.8	9.8
Hungary	6.0	5.4
Poland	9.1	7.8
Romania	8.9	4.7
Hard-currency total 1988 % of all trade*	31.6	31.0
1989 Jan-Jun % of external trade of		
Western Europe	1.4	1.4
Germany**	3.4	3.0
Japan	0.4	0.2
United States	0.1	0.3

*The bulk of Eastern Europe's trade occurs within COMECON, including the Soviet Union, at accounting prices and exchange rates not set by world markets.

**Including trade with East Germany.

Eastern Europe: a cautionary note*

The downfall of the old-line Communist rulers of Eastern Europe is triggering seemingly irreversible, yet dizzying, ongoing change in the region. Assuming the Soviet Union continues to pull back, potentially significant opportunities are opening up for Western firms and investors. Wisely developed, the Eastern economies could multiply their living standards, provide large-scale outlets for Western firms, and function as handy, low-cost production sources for the West European market. Nonetheless, a sober view is warranted of both the near-term payoff and the long-term chances for success. The road ahead is ridden with potholes, even in the case of East Germany whose integration with the West may be less a matter of economics than of politics.

Due caution begins with the recognition that the Eastern countries, excluding the Soviet Union, are of modest immediate economic significance to the West, even to West Germany. Though their collective population of about 110 million is roughly one-third that of today's European Community, their GNP — of which all estimates are necessarily shaky — may be only about one-seventh the EC's, or less than that of Italy alone (see Table 5). Their per capita incomes range much below Portugal's, in the case of Romania, to somewhere about Spain's, in the case of East Germany. Of course, their economies show none of the dynamism of the Iberian peninsula and some continue to lose skilled labor on a major scale to emigration; 1989's flight of nearly 350,000 from East Germany may slash output up to 5% this year.

Moreover, the Eastern economies have limited potential as export markets for the West. In 1989 their combined hard-currency purchases came to just \$36 billion (see Table 6), with up to 70% of their external trade instead conducted among themselves or with the Soviet Union. The existing COMECON trade regime now stands at death's door. A workable successor will have to substitute world market prices for the former fictions and provide for hard-currency settlement of trade imbalances beyond whatever credit limits, if any, may be agreed. Though COMECON members then will switch trade to hard-currency markets whenever advantageous, politics, technical impediments, and other adjustment costs will make the switch a long drawn-out process.

Suppose, at the extreme, that the Eastern economies raise the proportion of their imports from hard-currency sources to 70% five years hence and are somehow able to finance 10% annual growth in their imports overall. In five years' time, their hard-currency imports would run about \$130 billion at today's prices. This would be no mean sum and might add two-to-three percentage points to West Germany's annual export growth. Yet, in absolute volume, the total exports of the four major Western European economies rose not much less just last year alone. Plainly, the markets of the West will remain the overwhelming arbiters of the export potential of most

*Many of the statistics on Eastern Europe cited in this article and the accompanying chart and tables are drawn from *PlanEcon Review and Outlook*, PlanEcon Inc., Fall 1989.

Table 7

External financial indicators

hard-currency denominated, billions of dollars

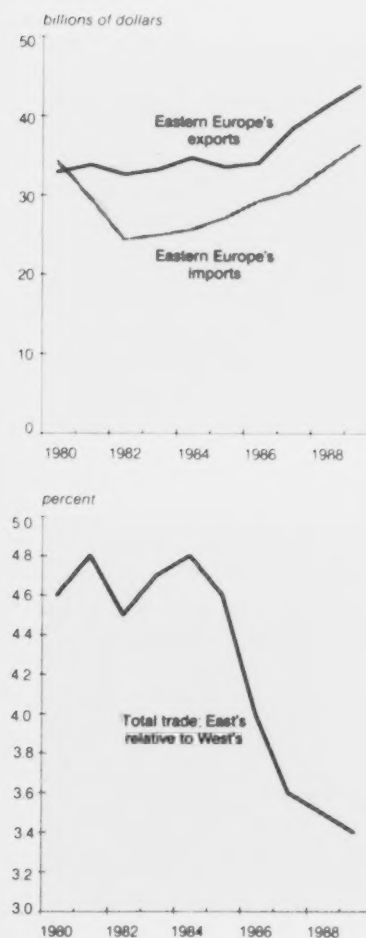
	Current account 1989	Assets* end- 1988	Debt, end-1988	
			Total	Percent of 1989 goods exports
Bulgaria	-0.5	1.8	7.8	210
Czechoslovakia	0.0	1.7	5.5	100
East Germany	0.5	13.2	20.7	210
Hungary	-1.5	3.5	20.0	330
Poland	-1.8	3.7	39.2	430
Romania	2.0	0.8	1.9	20

*Deposits in BIS-reporting Western banks plus other assets of uncertain marketability.

Chart 11

Europe's trade: East and West

hard-currency denominated



Western firms, even if some do well in the East.

Most of all is caution warranted concerning the investment potential of the East European economies. Take the case of East Germany. Providing its 16 million population with a capital stock akin to the Federal Republic's would take cumulative investment in plant, equipment, and infrastructure of up to \$300 billion from some mix of internal and external sources. Western capital goods and construction firms drool at the prospect. But, if the creditworthiness of almost all Eastern economies is in serious question, who will pick up the financing tab and with what chances of success? What must the recipient economies do to develop market systems that will allocate resources productively, and how best can they be helped to do so?

Without backup from the West, the Eastern economies are not yet prudently bankable on commercial terms, and certainly not for general-purpose balance of payments funding. None, except perhaps East Germany, has substantial reserves (see Table 7). Worse, after nearly a decade's workout, Poland's hard-currency foreign debt stands as high as

ever relative to exports; Hungary has had considerable trouble procuring financing; and East Germany has coped only with the help of the Federal Republic.

Moreover, export expansion by the Eastern economies in the 1980s met only limited success (see Chart 11), was hugely costly to living standards and investment, and did little to relieve the dearth of hard currency for imports to support development — much as in many debt-loaded Latin American economies. The Eastern economies now can try to divert exports from COMECON partners to Western markets. However, many of the products concerned are not presently of a quality salable in Western markets and bringing them up to par may well take years to accomplish. In the meantime, the overall exports and growth of the Eastern economies will be severely limited by domestic needs and supply constraints. At the same time, especially for the heavy borrowers of the past, debt service will be competing with imports for scarce foreign exchange.

The casting-off of Communist Party rule therefore does not unlock doors to large-scale new money for the East in the form of *private debt* finance without Western official guarantee or the strong expectation of comfort. Nonetheless, banks will be pressured for new money or reduction of existing claims, perhaps in the context of the 1989 Brady Initiative. The pressure has begun in the case of Poland, no matter that banks hold less than one-quarter of Poland's \$40 billion debt versus the two-thirds owed to Western official creditors. The banks' steering committee and the officials' Paris Club met jointly in January on

Poland's needs. Many banks may lean to debt reduction, and the officials to further rescheduling. But the officials will stay wary of cutting back their claims, lest middle-income borrowers elsewhere in the world demand similar relief.

More certain, and in large measure for political reasons, is a major pickup in the flow of official finance to East Germany and to other Eastern countries making credible efforts to right their economies. Closer links with Western multilateral institutions should help. Hungary, Poland, and Romania have been members of the IMF and the World Bank for some years already. Czechoslovakia now is expected to apply for Fund membership, and Bulgaria is considering the possibility.

Given genuine commitment to reform, the Bretton Woods sisters have much to offer both in advice and in cash, whether from their own resources or by triggering other official credits. Indeed, Fund programs are almost prerequisite to assistance from the EC, Japan, and the United States. Hungary has begun reforms with an eye to a Fund package and a \$1 billion credit tentatively pledged from Western governments. And Poland already has reached an IMF accord intended to provide \$700 million in Fund credit over 13 months and later this year may qualify for substantially greater Fund support. Related to its initial IMF accord is an early \$1 billion currency stabilization loan from Western governments and up to \$1.7 billion in possible World Bank credits.

As do other would-be reformers, Poland faces a daunting stabilization challenge. It must secure and maintain wage restraint

as it removes subsidies, hikes prices for essentials, and otherwise tackles fiscal imbalance and the inflationary legacy of monetary "overhang."* Poland's New Year package attempts shock therapy, including a sixfold wintertime leap in house-coal prices and overall inflation of nearly 80% in January alone. The government hopes that underindexing of wage increases will bring inflation down to 5% monthly before midyear. In the process it anticipates a 2%-3% drop in output this year and a 20% plunge in real incomes from prior (overstated) levels. More drastic declines can hardly be ruled out, and up to a million job losses — 6% of the labor force — may come to pass in an economy unprepared for open unemployment.

The Polish government further is staking its political credit on structural reforms, including privatizations. The logic is not merely that market forces should determine prices, including ultimately the newly devalued exchange rate, but also that individuals and enterprises should respond affirmatively so as to supersede central planners and allocate economic resources efficiently. This goal, however, assumes a profit motivation and entrepreneurial flare that have been largely suppressed for four decades. Moreover, the legal, regulatory, fiscal, accounting, and banking frameworks are hardly

*Under price controls, incomes and purchasing power may exceed the value of goods available, leaving queuing to handle the imbalance. If price rationing is introduced and eliminates queues, prices must rise not only to balance income and goods flows, but also in the short run to mop up excess savings accumulated in the past. The problem is complicated in Poland's case by the estimated \$6.5 billion in hard-currency circulating cash and deposits in the banking system, whose purchasing power cannot be eroded by zloty depreciation or normal demand management.

up to scratch for the job of nurturing a competitive market.

Poland's overall program is unquestionably bold. The government's political honeymoon gives some leeway for the stabilization shock therapy to work, this almost certainly being the best strategy to arrest incipient hyperinflation. The fate of the structural reforms is more difficult to evaluate. No road map exists for the successful conversion of sometime Stalinist economies to a dynamic market model. Little guidance is available from the halfhearted exercises previously tried in Poland and elsewhere. Nor do the histories of most reform efforts in Latin America suggest a clear way forward.

Western governments are groping to come up with constructive ways to increase the chances for successful reforms in the East, aware that the new leaderships there lack experience and may be vulnerable to conservative reaction. A modicum of official assistance to relieve stabilization hardships can hardly be questioned. There is a danger, however, that large-scale provision of official funds — perhaps through the proposed European Bank for Reconstruction and Development — would wind up underwriting uncompetitive public-sector showpieces rather than seeding private initiatives.

More valuable to the Eastern economies than gifts or loans from Western governments would be increased joint venturing and other direct investments by Western firms. Many joint ventures are indeed getting under way, and General Electric's deal with Hungary's Tungsram lighting firm is a prominent recent instance of direct investment interest. Besides bringing Western technical, managerial, and marketing know-

how, along with capital goods, such investments potentially are the best bet to allay the Eastern economies' acute shortage of marketable products and foreign exchange and to begin rebuilding their access to bank credit from the West. To realize the potential requires that existing deterrents be eliminated. Thus, as East Germany moves to lift its joint venture ban, it would make little sense to install a restrictive successor regime. More generally, foreign investors require credible and predictable legal, regulatory, and fiscal arrangements to define property rights and allow profit repatriation at will or within an acceptable time horizon. These arrangements are needed in any event for markets to function. But they will not come into place overnight, least of all while political systems remain in flux.

An ideal investment environment, from the standpoint of resource allocation, would forswear arbitrary export performance requirements of foreign investors, ownership limits, or other discrimination against them. This will not be easy for economies subject to ethnic or nationalist sensitivities, of which foreign investors in turn must be mindful. Still, nondiscrimination is important in investment matters, not least so that the Eastern economies may develop constituencies in the West to improve their trade access to Western markets, in particular those of the European Community. Currently, only East Germany enjoys any degree of free access to the EC, its trade with West Germany being treated as intra-EC trade free of tariffs and quotas.* Over time, the Eastern countries will have to win trade privileges in the EC comparable to those enjoyed by

*Market access alone, however, will not bring out the Eastern economies' comparative advantage unless their currencies also are realistically valued — which means aligning "official" and black market rates at levels that maintain, and preferably build, competitiveness — and the controls and subsidies are dismantled that still block internal transmission of world market forces.

EFTA members, ultimately leading to their effective integration with the West European economy. Such privileges may not be won easily, given that new economic competition from the East will not be universally welcomed, not to mention the thorny issues of democracy, human rights, and security arrangements still to be worked out in the East.

All told, the Eastern countries will need many years to transform themselves into dynamic market economies. Certainly, increases in trade and investment vis-à-vis the East will not prove

a substantial *direct* stimulus for the West in the short run. *Indirectly*, however, and despite the risk of setbacks, the changes in Eastern Europe should be a plus for general investor confidence in the West, particularly in Western Europe. They also must be expected to spur cuts — of cumulatively major proportions — in Western defense outlays. By the mid-1990s, the consequences for the West should not be belittled in either respect, whether or not the Eastern countries themselves attain prosperity.

Statistical appendix

Effective exchange rates — industrial countries, 17

Real effective exchange rates — developing countries, 18

J.P. Morgan Government Bond Index, 18

Government bond yields, 19

Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

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Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Netherlands	Spain	Switzerland	Denmark	Norway	Sweden
Nominal against 15 other industrial-country currencies																
1985	127.0	92.8	115.9	76.3	85.5	107.8	82.1	88.2	104.2	89.6	104.0	75.6	109.5	95.1	95.6	83.9
1986	106.0	87.6	150.1	61.4	87.4	116.1	82.9	80.7	107.8	92.9	110.3	73.4	118.1	99.7	89.2	81.6
1987	94.1	89.6	164.4	58.3	87.1	122.0	82.3	79.0	110.6	95.6	114.6	73.1	123.1	102.8	85.7	80.1
1988	88.0	95.6	181.6	61.9	85.7	121.8	79.8	83.8	110.2	94.6	114.4	75.6	121.9	101.2	85.6	80.3
1989	91.3	100.5	172.8	65.6	84.9	121.0	80.6	81.3	110.0	94.2	113.6	78.9	115.8	99.0	85.8	81.2
1989																
February	88.5	99.3	183.8	68.6	84.0	120.2	79.9	85.4	109.5	93.6	112.8	79.0	117.7	98.0	86.0	80.7
March	89.7	99.1	181.1	66.2	84.6	120.4	79.7	84.3	109.5	93.7	112.9	79.2	116.2	98.0	86.0	80.8
April	89.9	99.8	179.4	65.4	84.9	120.6	79.9	83.9	109.9	93.9	112.9	79.6	113.8	98.2	86.2	81.2
May	92.6	100.1	174.7	64.7	84.5	120.0	80.2	83.0	109.7	93.6	112.8	78.6	112.3	97.7	86.2	81.5
June	94.7	100.1	168.8	64.7	84.3	120.1	80.7	80.2	109.6	93.8	113.1	76.9	116.0	98.0	86.1	81.7
July	92.0	100.2	170.1	63.1	84.7	120.8	81.2	81.1	109.8	94.2	113.5	78.9	116.8	98.9	85.7	81.3
August	92.5	101.6	170.0	64.2	84.7	120.2	81.5	80.5	109.6	93.9	113.2	78.7	116.3	98.5	85.8	81.5
September	93.8	101.2	166.3	65.8	84.7	120.2	81.3	80.1	109.4	93.9	113.1	78.6	115.9	98.4	85.8	81.7
October	91.8	101.5	167.6	64.9	85.5	122.0	80.6	78.7	110.5	94.5	114.2	78.6	116.1	99.6	85.6	81.3
November	91.4	101.9	165.2	65.6	85.9	122.9	81.0	77.0	111.0	95.2	115.0	79.1	115.6	101.0	85.4	80.7
December	89.7	102.2	162.6	65.0	86.8	125.0	81.1	75.6	111.6	96.3	116.4	79.4	114.9	102.8	85.3	79.6
1990																
January	89.0	100.9	159.5	64.0	87.5	125.2	81.0	76.6	112.3	96.6	116.7	79.4	116.0	103.5	85.4	79.3

Real against 15 other industrial-country currencies

1985	122.3	96.4	97.0	89.4	100.5	96.7	100.2	92.9	103.3	85.3	96.6	92.4	98.0	101.3	99.7	96.8
1986	102.4	93.6	115.4	79.6	103.5	103.4	102.9	87.4	106.8	84.8	101.3	94.2	106.0	107.8	97.7	96.3
1987	91.8	96.8	119.6	81.8	104.8	106.9	103.8	87.5	108.9	84.7	104.2	96.2	110.1	112.1	100.9	95.8
1988	87.4	104.7	125.9	91.1	102.2	106.2	104.2	94.4	107.6	81.5	100.7	100.8	107.1	112.0	102.1	99.3
1989	91.8	108.1	118.2	98.1	100.2	104.7	107.9	93.6	107.2	80.2	97.5	106.6	100.3	110.3	101.5	104.9
1989																
February	89.2	108.3	124.1	101.8	99.3	104.7	106.9	97.5	106.5	79.7	96.6	106.4	101.8	108.4	102.2	103.4
March	90.3	108.3	122.3	98.2	99.8	104.6	106.6	96.2	106.0	79.7	97.5	106.7	100.7	108.7	101.8	104.0
April	90.3	108.3	123.1	96.5	100.1	104.4	106.7	95.8	106.4	80.0	98.4	106.8	98.6	109.0	101.6	104.7
May	93.0	108.0	120.0	96.1	99.4	103.7	107.5	95.0	106.0	80.2	97.9	105.9	97.6	108.9	102.4	105.0
June	95.0	107.6	116.6	95.9	99.2	103.8	107.9	91.9	106.6	80.2	97.7	103.8	100.7	109.0	102.6	105.3
July	92.3	107.7	117.5	94.2	100.1	104.5	108.7	93.4	108.8	80.4	96.3	106.9	101.0	109.9	101.2	105.0
August	92.8	109.1	117.2	96.2	100.1	103.8	109.0	92.9	108.6	80.2	96.3	106.8	100.5	109.9	100.8	105.7
September	94.0	108.3	114.8	99.0	100.0	103.7	109.0	92.7	106.6	80.0	96.8	106.7	100.4	110.3	101.5	105.8
October	92.6	107.9	114.7	98.0	100.8	105.1	108.1	91.3	107.5	80.4	97.8	106.9	100.7	111.8	101.0	105.2
November	92.2	108.0	113.0	99.5	101.4	105.7	108.9	89.6	108.0	80.5	98.4	107.6	100.4	113.7	100.8	106.1
December	90.5	107.8	111.2	99.1	102.5	107.4	109.2	88.2	109.0	81.4	99.7	108.0	99.7	115.7	100.4	104.6
1990																
January	89.9	105.9	108.7	97.8	103.0	107.4	109.0	90.3	110.0	81.6	99.9	108.9	100.1	115.8	100.9	105.3

Real against 18 other industrial-country and 22 LDC currencies

1985	123.8	99.1	101.9	90.0	100.0	95.8	99.8	92.4	102.9	84.5	94.8	93.1	97.7	101.2	100.0	96.8
1986	107.8	94.7	120.0	81.4	104.2	104.7	104.4	88.3	107.7	85.4	101.3	96.8	107.9	108.3	98.5	97.1
1987	97.8	97.0	123.3	83.3	106.1	109.3	106.5	89.3	110.5	85.9	105.2	99.8	113.1	113.1	102.0	97.1
1988	92.4	104.3	128.9	92.1	102.8	107.6	106.1	95.6	108.7	82.2	101.0	103.7	109.2	112.8	102.9	100.2
1989	96.3	108.1	121.5	98.6	100.4	105.1	109.1	94.2	107.8	80.4	97.1	109.2	101.8	110.7	102.1	105.0
1989																
February	93.7	107.9	127.3	102.9	99.4	105.0	107.9	98.2	107.1	79.8	96.1	108.4	103.1	108.9	102.9	103.7
March	95.2	108.3	125.7	99.0	100.0	105.0	107.7	96.9	106.6	79.9	97.1	109.1	102.0	109.2	102.5	104.2
April	95.6	108.3	127.0	97.5	100.3	104.9	108.2	96.4	107.0	80.2	98.1	110.0	100.1	109.5	102.3	104.8
May	98.0	108.3	124.2	96.7	99.6	104.1	108.8	95.5	106.5	80.2	97.4	109.1	99.0	109.3	103.0	105.1
June	99.4	108.0	120.3	96.2	99.3	104.0	109.0	92.3	107.1	80.2	97.0	106.4	102.0	109.4	103.2	105.2
July	96.9	107.8	120.7	94.9	100.4	105.0	110.0	94.0	109.4	80.5	95.9	109.6	102.5	110.3	101.7	105.0
August	97.2	109.1	120.4	96.5	100.3	104.1	110.1	93.3	109.1	80.2	95.7	109.3	101.8	110.2	101.3	105.6
September	97.9	108.4	117.8	99.0	100.1	103.8	109.9	93.0	107.0	80.0	96.1	109.0	101.6	110.6	102.0	105.6
October	96.7	107.8	117.5	98.3	101.0	105.5	109.3	91.9	108.1	80.6	97.4	109.4	102.2	112.2	101.5	105.1
November	96.2	107.9	115.6	99.7	101.7	106.2	110.1	90.0	108.7	80.8	98.1	110.2	102.0	114.1	101.3	106.0
December	94.7	107.5	113.5	99.4	103.0	108.5	111.0	88.9	110.0	81.9	99.8	111.1	101.7	116.1	100.8	104.6
1990																
January	93.7	105.6	109.0	98.3	103.5	108.6	110.4	90.4	111.0	82.2	100.0	111.9	101.9	116.2	101.3	105.2

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1985	71.2	85.0	79.6	85.5	90.5	96.8	93.0	103.5	94.5	89.3	126.7	114.5	95.6	94.5	224.4	71.8
1986	61.3	74.7	69.0	67.9	65.3	97.1	89.5	93.9	72.8	76.3	103.1	90.8	80.8	89.1	62.7	57.1
1987	53.9	74.2	65.7	63.6	67.1	108.4	65.0	89.9	56.1	75.6	96.5	87.6	74.5	94.6	49.4	45.1
1988	59.7	81.2	60.8	61.3	80.0	124.5	71.9	90.6	54.0	82.3	85.0	89.4	73.1	100.1	50.7	59.7
1989	49.9	97.9	62.2	60.2	76.7	186.0	65.2	98.7	55.8	92.3	82.9	95.8	78.1	105.6	61.9	61.9
1989																
February	71.6	82.2	62.5	60.4	78.1	129.2	96.8	93.5	53.7	89.4	79.9	92.4	77.1	102.2	58.5	61.2
March	79.5	83.9	61.9	62.0	78.4	140.4	48.5	95.8	54.4	90.6	79.9	92.2	77.2	103.0	60.1	61.0
April	39.0	88.3	64.1	61.7	78.0	165.0	51.9	97.4	54.6	91.5	80.5	92.1	77.1	104.8	60.8	62.2
May	29.0	92.9	67.4	61.5	78.1	171.2	59.3	101.4	55.9	93.8	83.2	94.7	78.8	109.9	63.0	64.7
June	43.0	95.0	64.6	61.5	77.6	189.5	64.3	102.3	57.0	95.3	85.5	96.1	79.7	109.7	64.0	66.6
July	49.2	93.0	61.3	60.9	76.0	187.0	64.5	98.3	56.0	93.2	85.7	93.7	78.4	107.2	61.5	64.7
August	48.4	102.3	61.1	61.0	75.3	191.2	64.3	98.6	56.8	93.6	86.2	96.5	78.6	108.1	62.3	63.4
September	49.1	112.0	61.4	60.4	75.2	204.7	68.2	100.9	57.4	94.5	86.4	99.1	79.1	108.2	63.4	61.7
October	48.6	113.6	60.6	58.7	74.2	225.0	67.0	100.0	56.8	92.8	83.8	99.0	78.2	105.7	63.1	56.8
November	49.0	118.5	59.4	57.8	73.4	264.5	63.8	103.1	56.8	92.4	82.8	99.4	77.8	104.3	64.0	57.4
December	41.4	117.0	58.5	56.8	72.7	319.6	64.8	101.0	56.0	91.0	80.9	100.2	78.1	102.0	62.5	55.3
1990																
January	28.9	108.3	59.4	58.2	72.2	432.5	67.8	97.4	55.8	87.4	80.5	100.9	78.6	99.2	57.2	53.7

J.P. Morgan Government Bond Index

index of total return for traded bonds, December 31, 1987=100
end of month

	1988	1989											1990
	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
<i>In local currencies</i>													
Australia	109.77	110.20	112.32	111.33	114.18	116.12	119.03	116.76	118.57	122.28	124.83	127.16	
Belgium	108.72	109.07	110.61	110.95	111.71	112.44	113.23	113.05	112.08	110.85	110.91	109.44	
Canada	109.08	110.15	113.12	115.95	119.09	120.94	119.67	118.98	121.87	121.22	122.99	122.02	
France	116.24	116.37	118.41	118.70	120.02	123.16	123.58	121.63	121.54	121.26	121.06	120.33	
Germany	105.23	104.00	104.97	104.52	106.17	107.64	107.04	106.50	106.23	105.28	106.26	104.43	
Italy	111.62	113.27	114.98	115.98	117.33	118.79	120.28	121.59	122.37	123.26	125.01	126.17	
Japan	105.89	104.62	104.76	104.32	103.92	105.95	106.12	106.09	104.87	104.80	104.30	100.44	
Netherlands	106.06	104.20	104.84	103.82	105.80	107.11	106.96	106.47	106.33	105.46	105.88	104.68	
Spain	109.73	111.75	112.75	113.55	114.67	115.82	117.27	118.47	119.25	119.66	119.82	122.24	
United Kingdom	106.74	109.58	110.04	108.91	109.97	114.11	114.20	112.18	113.51	112.75	115.29	112.58	
United States	106.78	107.94	110.18	112.73	116.44	118.84	116.84	117.36	120.32	121.45	121.70	120.06	
<i>In dollars</i>													
Australia	129.84	125.08	123.57	115.97	119.48	122.26	125.91	125.63	128.58	132.78	136.50	135.54	
Belgium	96.23	90.23	92.22	88.26	89.97	94.65	90.76	94.52	95.61	97.64	102.74	102.36	
Canada	118.89	119.98	123.97	124.99	129.38	133.16	132.13	131.34	134.92	135.40	138.06	133.65	
France	102.22	96.78	99.10	94.18	96.29	103.85	99.13	101.81	103.65	108.03	111.33	111.69	
Germany	93.36	86.06	87.62	82.98	85.35	90.71	85.46	89.21	90.68	92.74	98.56	97.11	
Italy	98.97	94.50	96.83	93.94	96.26	102.92	99.14	103.15	105.14	108.79	114.27	116.73	
Japan	102.63	95.38	95.45	88.71	87.54	93.73	88.56	92.21	89.02	88.74	87.70	84.17	
Netherlands	93.69	86.03	87.29	82.34	84.91	89.98	85.25	88.90	90.48	92.68	97.93	97.19	
Spain	103.93	101.87	103.85	96.82	99.14	106.39	102.75	106.86	109.79	111.57	117.52	120.50	
United Kingdom	102.47	97.93	98.57	90.83	90.53	100.71	94.97	96.12	95.10	93.83	98.66	100.27	
United States	106.78	107.94	110.18	112.73	116.44	118.84	116.84	117.36	120.32	121.45	121.70	120.06	
Global	105.47	103.45	105.20	104.18	106.56	110.84	107.62	109.38	110.80	111.80	113.16	111.48	
Global excluding United States	102.07	96.00	97.03	91.42	92.14	98.53	93.83	96.93	96.47	97.27	99.86	98.19	

Government bond yields

by maturity sectors in years, for traded bonds included in the J.P. Morgan Government Bond Index in percent per annum (semiannual basis), at end of month

	1987	1988	1989										1990
	Dec	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Australia													
1-3	11.38	13.78	14.95	14.67	15.44	15.00	14.78	14.43	15.48	15.49	14.73	14.30	13.61
3-5	11.97	13.71	14.62	14.37	15.06	14.47	14.28	13.88	14.82	14.68	13.99	13.57	13.22
5-7	12.51	13.34	14.14	13.92	14.45	14.08	13.92	13.52	14.38	14.28	13.74	13.39	13.19
7-10	12.89	13.08	13.82	13.56	14.10	13.75	13.62	13.10	13.91	13.79	13.28	13.01	12.89
10+	12.98	13.00	13.59	13.34	13.86	13.45	13.34	12.93	13.65	13.50	13.00	12.87	12.75
Belgium													
<5	7.91	7.82	8.40	8.20	8.37	8.39	8.36	8.30	8.62	9.08	9.69	9.74	10.28
5+	8.09	8.00	8.38	8.20	8.25	8.24	8.24	8.26	8.42	8.81	9.23	9.44	9.98
Canada													
1-3	9.75	10.60	11.51	10.81	10.46	9.87	9.71	10.33	10.34	10.07	10.69	10.64	10.58
3-5	9.84	10.38	10.99	10.39	10.02	9.54	9.30	9.88	10.10	9.91	10.26	10.05	10.21
5-7	10.08	10.24	10.67	10.16	9.77	9.38	9.16	9.64	9.95	9.64	9.92	9.76	10.03
7-10	10.03	10.22	10.53	10.11	9.72	9.32	9.17	9.56	9.83	9.55	9.79	9.65	10.00
10+	10.12	10.21	10.28	10.02	9.74	9.42	9.27	9.50	9.78	9.40	9.61	9.51	9.89
France													
1-3	9.10	8.16	8.77	8.54	8.75	8.77	8.40	8.48	8.94	9.18	9.52	10.01	10.18
3-5	9.40	8.32	8.89	8.61	8.76	8.75	8.28	8.39	8.88	9.20	9.32	9.65	9.93
5-7	9.60	8.26	8.72	8.53	8.65	8.60	8.15	8.25	8.75	8.99	9.13	9.32	9.62
7-10	9.69	8.38	8.77	8.52	8.62	8.52	8.14	8.23	8.64	8.75	8.98	9.12	9.44
10+	9.75	8.57	8.93	8.69	8.76	8.66	8.29	8.34	8.76	8.82	9.03	9.14	9.42
Germany													
<5	4.85	5.87	6.77	6.72	6.96	6.80	6.58	6.86	7.15	7.40	7.66	7.57	8.01
5-7	5.71	6.21	6.82	6.76	7.01	6.81	6.60	6.85	7.07	7.27	7.61	7.48	7.99
7+	6.25	6.44	6.85	6.75	6.92	6.70	6.55	6.77	6.95	7.09	7.39	7.33	7.81
Italy													
1-3	10.90	11.40	12.62	12.41	13.28	13.37	13.46	13.43	13.42	13.60	13.69	13.53	13.63
3+	10.62	12.74	13.49	13.37	13.51	13.36	13.32	13.35	13.33	13.60	13.79	13.68	13.79
Japan													
1-3	3.82	3.88	4.68	4.72	5.08	5.09	4.98	5.00	5.23	5.64	5.91	6.04	6.61
3-5	4.09	3.94	4.70	4.73	5.00	5.16	4.93	5.00	5.15	5.55	5.82	5.95	6.51
5-7	4.38	4.04	4.72	4.75	4.88	5.13	4.84	4.90	4.99	5.33	5.49	5.75	6.48
7-10	4.84	4.62	4.90	4.96	5.11	5.25	4.92	4.97	5.05	5.33	5.39	5.56	6.46
10+	5.62	4.94	5.06	5.07	5.19	5.17	5.19	5.19	5.12	5.33	5.39	5.54	6.25
Netherlands													
1-3	5.13	5.99	7.02	7.03	7.39	7.15	7.00	7.21	7.45	7.79	8.19	8.42	8.54
3-5	5.89	6.07	6.95	6.94	7.30	7.05	6.87	7.06	7.34	7.53	7.88	7.91	8.31
5-7	5.99	6.13	6.97	6.94	7.31	7.01	6.84	7.02	7.27	7.42	7.78	7.84	8.24
7+	6.23	6.34	7.00	6.98	7.32	7.00	6.87	7.02	7.20	7.36	7.66	7.71	8.15
Spain													
1-3	13.62	12.78	13.39	13.45	13.46	13.46	13.50	13.42	13.47	13.63	13.92	14.46	13.97
3+	14.70	11.79	12.21	12.27	12.60	12.80	12.73	12.73	12.93	12.32	13.32	13.77	13.47
United Kingdom													
1-3	9.17	11.32	11.22	11.40	11.96	11.90	11.10	11.31	12.42	11.98	12.52	12.38	12.83
3-5	9.25	10.72	10.67	10.80	11.20	11.10	10.36	10.55	11.34	11.11	11.52	11.24	11.92
5-7	9.46	10.58	10.46	10.57	10.93	10.91	10.27	10.44	11.12	10.96	11.34	11.06	11.71
7-10	9.63	10.23	10.12	10.23	10.59	10.56	9.99	10.13	10.64	10.58	10.88	10.59	11.28
10+	9.67	9.79	9.81	9.79	10.12	10.09	9.64	9.76	10.15	10.15	10.43	10.17	10.79
United States													
1-3	7.69	9.14	9.77	9.24	8.84	8.11	7.62	8.40	8.46	7.92	7.78	7.90	8.30
3-5	8.19	9.15	9.64	9.15	8.77	8.10	7.58	8.35	8.43	7.91	7.81	7.92	8.39
5-7	8.50	9.19	9.48	9.11	8.71	8.12	7.67	8.33	8.40	7.95	7.84	7.98	8.43
7-10	8.76	9.18	9.35	9.06	8.66	8.14	7.78	8.31	8.37	7.97	7.89	7.99	8.45
10+	8.99	9.11	9.23	9.02	8.69	8.15	7.97	8.34	8.38	8.02	7.99	8.08	8.56

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